

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTER PATENT
OF THE UNITED STATES IS:

1. A method of certifying at least existence of electronic information released on a network at a time and date, said network connecting one or more computer servers and a plurality of client computers, said method comprising the steps of:

accessing electronic information stored in a predetermined one of the plurality of client computers using information of its location from one of the computer servers based on a request from one of the client computers;

obtaining a copy of the electronic information;

generating attribute information from at least the location and a time and date when said step of accessing the electronic information is executed;

generating an electronic certificate by uniquely specifying the electronic information and the attribute information;

obtaining and storing a copy of the electronic certificate in a first memory; and

storing a copy of the electronic information in a second memory.

2. The method according to claim 1, wherein said first memory is provided in the one of the computer servers, and said electronic information is stored in said second memory by tying up said electronic information with at least the electronic certificate and the attribute information

3. The method according to claim 1, wherein said second memory is provided in the one of the computer servers.

4. A method of certifying electronic information released on a network at a time and date, said network connecting one or more computer servers and a plurality of client computers, said method comprising the steps of:

accessing, periodically, electronic information stored in one of the client computers using information of its location from one of the computer servers based on a request from one of the client computers;

copying the electronic information at each period access;

generating attribute information at each periodic access from at least the location, access time, and date when the step of periodically accessing the electronic information is executed, and a access condition;

generating electronic certificates by uniquely specifying each of the electronic
5 information and respective attribute information; and

obtaining and storing each of the electronic certificates in a first memory; and
storing each copy of the electronic information by tying up each copy of the
electronic information with at least one of the electronic certificates and one of the applicable
attribute information in a second memory.

10 5. The method according to claim 4, further comprising the step of providing the
electronic information together with a respective of the electronic certificate and attribute
information to the one of the client computers.

6. The method according to claim 4, wherein said step of periodically accessing the
electronic information is executed from a second of the computer servers.

15 7. The method according to claim 4, wherein said step of periodically accessing the
electronic information is executed at a predetermined interval.

8. The method according to either one of claims 1 and 4, further comprising the steps
of:

20 displaying one or more links respectively representing the electronic information; and
allowing access to the electronic information using an applicable link by one of the
client computers.

9. The method according to claim 8, wherein said one of the client computers is a
public use computer.

25 10. The method according to claim 4, further comprising the steps of:
detecting a change in contents of the electronic information; and
storing, if the change is detected, the change in the second memory in addition to the

electronic information initially stored.

11. The method according to either one of claims 1 and 4, further comprising the steps of:

generating a database from one or more electronic information stored in the second memory, said database being provided in one of the computers other than the one of the computer servers; and

allowing retrieval by a public of the electronic information via the one of the client computers other than the one of the computer servers.

12. The method according to either one of claims 1 and 4, further comprising the steps of:

generating one or more abstracts of the electronic information stored in the second memory;

generating a database from the one or more abstracts, said database being provided in one of the computers other than the one of the computer servers; and

allowing retrieval by the public for a abstract by the one of the computers other than the one of the computer servers.

13. The method according to either one of claims 1 and 4, further comprising steps of:

storing information indicating availability of retrieval for the electronic information via the network in a third memory when the electronic information can be retrieved via a one of the plurality of client computers.

14. The method according to either one of claims 1 and 4, wherein said network includes an Internet.

15. The method according to either one of claims 1 and 4, wherein said electronic information includes a document described by a markup language generating a web page.

16. The method according to either one of claims 1 and 4, wherein said location

information includes a uniform resource locator (URL).

17. The method according to claim 4, wherein said access condition includes at least any one of an access source IP address of the one of the client computers and a number of access times.

5 18. The method according to either one of claims 1 and 4, wherein said electronic information is stored in the one of the client computers that makes said request.

10 19. The method according to either one of claims 1 and 4, wherein said step of accessing the electronic information is executed at an optional time which an operator of the one of the client computer generating the request is not aware of.

20 20. The method according to either one of claims 1 and 4, wherein said step of generating an electronic certificate is executed by a third computer other than the one of the computer servers.

15 21. The method according to claim 4, wherein said attribute information further includes at least any one of an electronic information displaying period of time, the access source IP address, and a number of access times.

22. The method according to either one of claims 1 and 4, wherein said uniquely specifying step includes the steps of:

20 calculating a first hash value from both of the electronic information and the attribute information;

obtaining a second hash value; and

assigning the first hash value and the second hash value to the electronic certificate as inherent information for the electronic information.

25 23. The method according to claim 4, wherein said access condition is designated by the one of the client computers when the request is made.

24. The method according to claim 4, further comprising the steps of:
detecting if an object is included in the electronic information when the electronic
information is provided to the one of the client computers; and
changing contents of a copy of the electronic information by describing a reference
into the copy of the electronic information for the object to be viewed in the one of the client
computers.

25. The method of claim 24, wherein said object is one of embedded inline in the
electronic information and referred to as an external resource.

26. The method according to either one of claims 1 and 4, wherein said step of
accessing the electronic information is executed either via the Internet or with a computer
readable medium.

27. A system for certifying at least existence of electronic information released on a
network at a time and date, said network connecting one or more computer servers and a
plurality of client computers, said system comprising:

an accessing device configured to access electronic information stored in one of the
plurality of client computers using information of a location of the electronic information
based on a request from one of the client computers, said accessing device being provided in
one of the computer servers;

a copying device configured to copy the electronic information;

an attribute information generating device configured to generate attribute
information from at least the location and an access time and date when the electronic
information is accessed;

an electronic certificate generating device configured to generate an electronic
certificate by uniquely specifying the electronic information and the attribute information;

an electronic certificate obtaining device configured to obtain the electronic
certificate; and

a storing device configured to store the copy of the electronic information,

28. The system according to claim 27, wherein said storing device is provided in the

one of the computer servers, and said electronic information is stored in said storing device by tying up the electronic information with at least the electronic certificate and the attribute information

29. The method according to claim 27, wherein said storing device is provided in the one of the client servers.

30. A system for certifying at least existence of electronic information released on a network at a time and date, said network connecting one or more computer servers and a plurality of client computers, said system comprising:

an accessing device configured to periodically access the electronic information stored in one of the client computers using information of a location of the electronic information based on an instruction from one of the client computers, said accessing device being provided in one of the computer servers;

a copying device configured to copy the electronic information at each of accesses;

an attribute information generating device configured to generate respective attribute information at each of accesses from at least the location, an access time, and date when the electronic information is accessed, and a access condition;

an electronic certificate generating device configured to generate electronic certificates by uniquely specifying and certifying the existence at the time and date and contents of each of the electronic information and the attribute information;

an electronic certificate obtaining device configured to obtain each of the electronic certificates; and

a storing device configured to store each of copies of the electronic information by tying up the electronic information with the respective one of electronic certificates and respective one of the applicable attribute information.

31. The system according to claim 30, further comprising a providing device configured to provide the electronic information together with the applicable electronic certificate and attribute information to the one of the client computers.

32. The system according to claim 30, wherein said electronic information is

accessed a second of the another computer servers.

33. The system according to claim 30, wherein said electronic information is accessed at an interval.

34. The system according to either one of claims 27 and 30, further comprising:
a link displaying device configured to display one or more links respectively representing the location of the electronic information; and
an accessing device configured to allow a public to access the electronic information using an applicable link, said access allowing device being provided in one of the plurality of client computers.

35. The system according to claim 34, wherein said one of the plurality of client computers is a public computer.

36. The system according to claim 30, further comprising:
a detecting device configured to detect a change in contents of the electronic information; and
a storing device configured to store, if the change is detected, the change in addition to the electronic information initially stored.

37. The system according to either one of claims 27 and 30, further comprising:
a database generating device configured to generate a database from one or more electronic information stored in the storing device, said database being provided in one of the computers other than the one of the computer servers; and
a retrieving device configured to allow public retrieval of the electronic information, said retrieving device being provided in the one of the computers other than the one of the computer servers.

38. The system according to either one of claims 27 and 30, further comprising:
an abstract generating device configured to generate one or more abstracts of the electronic information stored in the storing device;

a database generating device configured to generate a database from the one or more abstracts, said database being provided in one of the computers other than the one of the computer servers; and

a retrieving device configured to allow public retrieval of the abstracts, said retrieving device being provided in the one of the computers other than the one of the computer servers.

39. The system according to either one of claims 27 and 30, further comprising:

a storing device configured to store information indicating availability of retrieval of the electronic information via the network when the electronic information can be retrieved, said storing device being provided in one of the plurality of client computers.

40. The system according to either one of claims 27 and 30, wherein said network includes an Internet.

41. The system according to either one of claims 27 and 30, wherein said electronic information includes a document described by a markup language generating a web page.

42. The system according to either one of claims 27 and 30, wherein said location information includes a uniform resource locator (URL).

43. The system according to claim 30, wherein said access condition includes at least any one of an access source IP address of the one of the client computers and a number of access times.

44. The system according to either one of claims 27 and 30, wherein said electronic information is stored in the one of the client computers that makes said request.

45. The system according to either one of claims 27 and 30, wherein said electronic information is accessed at an optional time which an operator of the one of the client computer generating the request is not aware of.

46. The system according to either one of claims 27 and 30, wherein said electronic

certificate is generated by a third computer other than the one of the computer servers.

47. The system according to claim 30, wherein said attribute information further includes at least any one of an electronic information displaying period of time, the access source IP address, and a number of access times.

5 48. The system according to either one of claims 27 and 30, wherein said uniquely specification is executed by calculating a hash value of both of the electronic information and the attribute information in a prescribed manner as inherent information identifying the electronic information, and assigning the hash value to the applicable electronic certificate.

10 49. The system according to claim 30, wherein said access condition is designated by the one of the client computers when the request is made.

15 50. The system according to either one of claims 27 and 30, further comprising:
a detecting device configured to detect if an object is included in the copy of the electronic information when the copy of the electronic information is provided to the one of the client computers; and

a changing device configured to change contents of the copy of the electronic information by describing a reference into the copy for the object to be viewed in the one of the client computers.

51. The system according to claim 50, wherein said object is one of embedded inline in the electronic information and referred to as an external resource.

20 52. The system according to either one of claims 27 and 30, wherein said electronic information is accessed either via the Internet or with a computer readable medium.

53. A computer readable medium storing a program for certifying at least existence of electronic information released on a network at a time and date, said program performing the steps of:

25 accessing electronic information stored in one of a plurality of client computers using

information of its location from one of computer servers based on a request from one of the client computers;

obtaining a copy of the electronic information;

generating attribute information from at least the location, an access time, and date

5 when said step of accessing the electronic information is executed;

generating an electronic certificate by uniquely specifying the electronic information and the attribute information;

obtaining the electronic certificate;

storing the copy of the electronic information in a memory.

10 54. The system according to claim 53, wherein said uniquely specifying is executed by calculating a hash value of both of the electronic information and the attribute information in a manner as inherent information identifying the electronic information, and assigning the hash value to the applicable electronic certificate.